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Cornwall County Council.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

1937.

E. M. CLARKE, M.D., Lond.



CORNWALL COUNTY COUNCIL.

EDUCATION COMMITTEE.

ANNUAL REPORT OF THE SCHOOL MEDICAL OFFICER FOR THE YEAR 1937.

School Medical Staff.

School Medical Officer:

E. M. CLARKE, M.D.Lond.

Assistant School Medical Officers:

DOROTHY A. CHOWN, M.R.C.S. Eng., L.R.C.P. Lond. J. A. CLARK, M.B., B.S. Lond., M.R.C.S. Eng., L.R.C.P. Lond.

*R. J. E. HANSON, M.A., M.B., B.Ch. Camb., F.R.C.S. Ed. ELIZABETH MACLEOD, M.D., Ch.B. Ed.

School Oculist:

*R. J. E. HANSON, M.A., M.B., B.Ch. Camb., F.R.C.S. Ed.

School Dental Surgeons:

W. H. ELLAM, B.D.S., Univ. L'pool. R. H. HAMLYN, L.D.S., R.C.S. Eng. F. R. TAYLOR, L.D.S., R.C.S. Eng.

Dental Attendants:

MRS. C. D. GOOD.

MISS C. M. GRIFFITHS.

MISS R. P. ROWE.

Orthopædic Surgeon (part-time):

W. W. RENTOUL, M.B., B.Ch., B.A.O. Belf.

Orthonædic Sisters:

MISS H. V. JONSSON, C.S.M.M.G., M.E. MISS J. D. NEWMAN, C.S.M.M.G.

Health Visitors:

MISS A. V. BATH.

MISS M. BRADLEY.

MISS A. FLAMANK. MISS D. V. GRAY.

MISS J. C. HENDERSON.

MISS A. A. HOUSMAN.

MISS G. VARCOE.

School Nurses:

The Health Visitors and 156 District Nurses give parttime to school work.

STATISTICS.

Elementary Education Area

(excluding the Boroughs of

Falmouth and Penzance): ... 863,132 acres.

Higher Education Area: ... 868,167 acres.

Population (1931 Census):

Elementary Education Area 282,921.

Higher Education Area 317,968.

Elementary Secondary.

School Population (on books)		32,786	3,744
Average Attendance	• • •	28,639	3,422
Number of Schools	• • •	*293	21
Number of Departments		*353	

^{*} The St. Just-in-Roseland Cl. School was closed on the 4th April, 1937, and the St. Stephen-in-Brannel: Coombe Cl. School was closed on the 27th September, 1937.

CO-ORDINATION.

The School Medical Officer is also the County Medical Officer of Health.

The whole-time Health Visitors undertake Maternity and Child Welfare Work and Tuberculosis Work in addition to School Work. The District Nurses undertake School and Maternity and Child Welfare Work in addition to District Nursing.

The County Inspector of Midwives is also the Superintendent of the Cornwall County Nursing Association and the Assistant Inspectors of Midwives are Assistant Superintendents of the Nursing Association.

SCHOOL HYGIENE.

Matters concerning school hygiene and school buildings come under the review of the appropriate Committees each month. The Assistant School Medical Officers during their school visits report defects of ventilation, lighting, heating, sanitation, etc.

MEDICAL INSPECTION.

In the Elementary Schools the age groups inspected at the annual routine inspections are—

Entrants.

Children 8 years old.

Children 12 years old.

"Specials" selected by parents and teachers and not due for inspection under the three previous groups.

Refraction is undertaken by Dr. Hanson for all children requiring it: for all other work the schools are arranged into four groups, one for each Assistant School Medical Officer. The medical inspections take place in the schools—usually one classroom is used for this purpose except in the few schools where a staff room is available. Where there is no staff room the school work is disorganised, especially if the school consists of one or two rooms only. Parents may have to be accommodated in a classroom containing all the children.

Nearly all the inspections are carried out in the schools but occasionally the homes are visited for examination of those children who are unable to attend school. Parents are always invited for the routine inspections. Each school is visited twice during the year—the second visit is usually made without notice.

FINDINGS OF MEDICAL INSPECTION.

(See Table II at end of report).

(a) Nutrition.

Table II B. gives the numbers examined and the classification made by the School Medical Officers. In 21.9% of the 10,486 children classified the nutrition was excellent, in 69.7% normal, in 7.7% slightly sub-normal, and in 0.8% bad. As usual the figures for the second age-group show most defects. There is some diversity of standard for the four groups, especially with regard to the boundary between A and B, and for comparative

purposes it is useful to add A and B together. Some comparative figures are—

	A	В	С	D
			Slightly	
	Excellent.	Normal.	Sub-normal.	Bad.
Cornwall 1936	21.1	69.7	8.3	0.8
Cornwall 1937	21.9	69.7	7.7	0.8
England and Wales 1936	14.6	74.2	10.5	0.7

(b) Uncleanliness. (See Table VI).

Health Visitors and District Nurses usually make at least one visit to each school each term and inspect all the children present. The figures are very similar to those for 1936. Of the individual children examined, 3,930 were not quite satisfactory. It must be noted that this figure includes all defects found, however slight. This gives a percentage of 12 which is higher than that for England and Wales (about 9.5%). If the inspection is not carefully performed, many cases are missed and the figures seem better. These figures are of course disappointing, but under the present school conditions improvement will be slow owing to the relapse of the chronic cases after cleansing.

(c) Minor Ailments and Diseases of the Skin.

Children suffering from minor ailments or diseases of the skin are excluded from school attendance when necessary and the home treatment supervised by the School Nurses. In large towns the children are sent from the schools to school clinics for daily treatment, but this is only useful in large centres—the numbers are too small elsewhere to warrant the establishment of school clinics. In England and Wales it is usually estimated that about 10% of children in average attendance require treatment annually for minor ailments and about this number of children are followed up by the School Nurses. It will soon be possible to arrange for X-ray treatment of ringworm of the scalp in the County. Previously the nearest centre was Plymouth. In 1927 a special inquiry was made as to the number of cases of ringworm known and 20 cases of ringworm of the scalp and 20 cases of ringworm of the body were reported. Ringworm of the

scalp is difficult to cure except by X-ray treatment and in view of the many months' exclusion sometimes required it will be useful to arrange for X-ray treatment in appropriate cases. Ringworm of the body is easily cured so that treatment by X-ray is not required.

(d) Visual Defects and External Eye Disease.

The number of children referred for treatment for defective vision was 447 and for squint 82—66 and 7.8 per 1,000 as compared with 76.3 and 7.7 for England and Wales. The visual defects referred for treatment are usually slightly less in number than those for England and Wales. As regards other eye defects, 4 per 1,000 were referred for treatment as compared with 6.8 for England and Wales. This is the usual figure and varies according to the general cleanliness and state of nutrition of the children.

(e) Defects of Hearing.

At the routine inspections 48 children were referred for treatment—4.5 per 1,000—about the usual number: 24 were referred for observation. For England and Wales 2.9 per 1,000 were referred for treatment. The number for Cornwall is high owing to there being so many children with enlarged tonsils and adenoids. Children referred for treatment for middle ear disease numbered 13 and for observation 10—the number referred for treatment was only 1.2 per 1,000 and as is usually the case was lower than that for England and Wales (4 per 1,000). The establishment of a special department for diseases of the ear, nose and throat at the Royal Cornwall Infirmary, Truro, in charge of a specialist, has been found most useful in the examination and treatment of defects of hearing.

(f) Nose and Throat Defects.

In recent years the Board's figures show the defects for three groups—(a) tonsils only, (b) adenoids only, and (c) tonsils and adenoids combined. In England and Wales the figures are about the same for (a) and (c)—about 20 per 1,000—while about 3 per 1,000 are referred

for treatment for adenoids only. In Cornwall there are always more cases of the combined defects referred for treatment—for the year under review 666 or 63.4 per 1,000. The figures for (a)—162 referred for treatment (15.4 per 1,000)—and (b)—24 referred for treatment (2.3 per 1,000)—are much the same as for England and Wales. The total for England and Wales for (a), (b) and (c) is 43.5 per 1,000, that for Cornwall 81.2. Cornwall always shows this higher rate.

(g) Orthopaedic and Postural Defects-See Table II.

At the routine inspections 70 children were referred for treatment for spinal curvature and 113 for other deformities. Only one child was referred for treatment for a deformity resulting from rickets.

Rates per 1,000.	Spinal Curvature.	Rickets.	Other Deformities.
Cornwall 1937	6.6	0.1	10.7
England and Wales	1936 2.5	1.2	8.2

As stated in previous reports there are in England and Wales many slight cases of postural defects, 76%. About 16% were considered to require treatment for spinal defect in a medical gymnastic class, and 7% required individual treatment.

(h) Heart Disease and Rheumatism.

Six children were referred for treatment for organic heart disease and 17 were referred for observation: the corresponding figures for 1936 were 6 and 16. This only gives 0.57 and 1.6 per 1,000 children, as compared with 1.6 and 3.5 for England and Wales. Some of these defects were congenital, others being due to rheumatism.

(i) Tuberculosis.

Doubtful cases are referred to the Tuberculosis Officer for investigation. The cases known to the Tuberculosis Officer were 6 pulmonary and 10 non-pulmonary.

(j) Goitre.

In my annual report for 1927 some particulars were given of goitre and enlarged thyroid glands in school children. Enlarged thyroid glands are more common at

puberty and especially in girls, but in normal children there should be no visible enlargement, and where the enlargement is visible it may be considered pathological rather than physiological.

In 1927 it was found that enlarged thyroid glands were seen in 10.9% of the children in the schools, as compared with 3.5% for England and Wales (Boys 2%, Girls 5%). It was also found that the incidence was much greater in certain areas, e.g.:

 St. Austell Education Area
 ...
 28.4%

 Bodmin Education Area
 ...
 ...
 31.7%

 St. Columb Education Area
 ...
 ...
 20.2%

Again, the incidence was much higher in the inland schools on high ground than in the schools near the coast.

It is agreed that the enlargement of the thyroid is a response to the demand for a greater supply of iodine, and is usually due to unsatisfactory water-supplies which interfere with the supply of iodine. In 1927 it was noted that in some clay districts near St. Austell new water supplies had been installed and that it would be interesting to see whether they made any difference to the goitre which was so common in the district.

Dr. J. A. Clark now reports: - "The most spectacular change has been the practical disappearance of goitre in the girls attending schools in the clay area where a piped water supply has been installed. In particular at St. Dennis, the number of enlarged thyroid glands ten years ago was anything up to 30% of the girls in the schools whereas there are now only one or two odd cases and these, it is found, are from families who do not drink tap water but get their water supply from wells or leats. The provision of a reservoir and piped water supply at St. Dennis took place about eight years ago and to this I attribute the consequent diminution or disappearance of goitre in that neighbourhood; this must be of economic importance in the neighbourhood as a woman with a goitre is not likely to raise such a healthy family as a woman would do who has not a goitre and cannot have the same expectation of life. From the scientific aspect I consider that the consumption of impure or contaminated water from wells and leats causes a drain on the iodine content of the body and the organ of the body which is susceptible to iodine deficiency is the thyroid, which consequently becomes enlarged in an effort to replace this iodine. St. Dennis is in an upland country where the water in wells

and leats has not been purified by great percolation and hence may be contaminated and this apparently was the cause of the goitres. The use of chlorine for the purification of well water should be more widespread, especially in goitrous areas, otherwise there is too great a drain on the iodine content of the body in an attempt to do this. These two substances, iodine and chlorine, are closely related, both belonging to the Halogen group and presumably have the same effect on contaminated water.

Another example is at Lanner where the few cases of enlarged thyroid take their water supply from outside the tapped supply."

FOLLOWING-UP.

Either a whole-time Health Visitor or a District Nurse attends the routine medical inspections at the schools and arrangements are made for a nurse to follow up to their homes children in need of treatment and, if necessary, to help in carrying out the treatment. Children excluded from schools by the Head Teachers are also followed up. The figures do not show all the work done by the Health Visitors and the District Nurses but the following are the figures available:—

	Whole-time Health Visitors.	District Nurses.	Total.
Number of children followed	up 885	1,932	2,817
Number of visits paid	2,313	7,921	10,234
Number of Medical Inspectio	ns		
attended	154	585	739
Number of Inspections for			
Cleanliness	165	864	1,029
"Following-up" Tonsils and			
Adenoids	55	197	252

ARRANGEMENTS FOR TREATMENT.

Nutrition. The arrangements made for the provision of milk in schools have been continued. Milk is supplied in bottles containing one-third of a pint at a cost of a halfpenny per bottle. Milk is provided free of charge for necessitous malnourished children and in special cases Cod Liver Oil is provided free. In a few specially selected cases free milk is provided for the afternoon session as well as the morning session.

At the end of the year 15,217 Elementary and 967 Secondary School children were receiving milk in school. Of the former number, 2,908 were receiving milk free of charge. Approximately 59% of children in average attendance were receiving milk. Cod Liver Oil was provided for about 62 children.

The scientific evidence of the benefit of milk for the average Elementary School Child is now generally accepted.

The consumption of milk in schools does not seem to increase but remains at a fairly constant level and there are still a few schools where a suitable supply of milk is not available. As many children do not like cold milk containers have been supplied for warming the milk when and where necessary. If the milk could be suitably flavoured it would probably be more popular.

As in previous years the School Medical Officers and the Head Teachers report that the Milk in Schools Scheme has most useful effects.

Dr. Elizabeth Macleod reports:—"I consider that the regular daily allowance of milk taken by the Elementary School children has a very beneficial effect on their health and wellbeing. Those who are weakly and of subnormal nutrition when they commence to take milk in school daily improve in vitality and general health even if they do not increase in weight."

Dr. Dorothy Chown finds it difficult to report how much improvement is due to the increased consumption of milk, as so many other factors come into play. In one school, however, where for years there has been much poverty and the children are the worst nourished in her district, there has been considerable improvement and 109 children out of 185 are receiving milk in school.

Dr. J. A. Clark draws attention to the large number of changes in retailers supplying milk to schools, owing to the poor financial return and the work entailed in cleansing a large number of bottles. This defect has been considered by the Committee but cartons are still very expensive. Some better system than the present one is very desirable and no doubt further experience will suggest a remedy.

The milk supply in the schools is usually Accredited Milk or of that standard. Some is Tuberculin Tested. Unfortunately even T.T. milk cannot be regarded as safe milk owing to the possibility of infection from cows and from milkers, etc. For safety, milk should be pasteurised, but it is desirable to see that only clean milk is pasteurised, as satisfactory results cannot be produced by the pasteurisation of dirty milk. The Ministry of Health reports some recent milk epidemics due to infected raw milk, including the Brighton and Hove outbreak of septic sore throat in 1929 affecting 1,000 families and causing 65 deaths; the Epping outbreak of paratyphoid B. fever in 1931 with over 260 cases; the Chelmsford outbreak of scarlet fever and sore throat in 1935 with 1,600 cases; and in 1936 the Bournemouth outbreak of typhoid fever with over 500 cases and 51 deaths, also the Doncaster outbreak of scarlet fever and sore throat comprising some 314 cases. In all the above outbreaks the milk supply, to which the infection had been directly traced. had passed routine bacteriological standards for cleanliness. Fortunately in the larger towns it is easy to arrange for a supply of pasteurised milk. In 1936 a mild epidemic of gastro-enteritis due to raw milk occurred in two schools in Wilton: in one school 89 children had taken the infected milk and 75 were infected, in the other school 33 children drank the milk and 32 were infected.

The Board of Education have for some years emphasised the desirability of providing children with safe milk, and suggest that where a supply of pasteurised milk is available such milk should in all cases be provided. The Board are now more than ever convinced of the wisdom and necessity of their policy of ensuring that, in areas where a supply of efficiently pasteurised milk is available, such milk should be supplied to all schools participating in the Milk in Schools Scheme. In the phosphatase test there is a valuable means for ascertaining that the milk has been efficiently pasteurised.

It is not yet practicable to arrange for the supply of clean pasteurised milk on a large scale to the schools in the County. Evidence continues to accumulate that there is no significant difference in the nutritive value of raw and pasteurised milk.

Uncleanliness, Minor Ailments and Diseases of the Skin, External Eye Disease. Children suffering from such defects are followed-up to their homes by the nurses and assistance given in obtaining treatment. When considered necessary, parents are advised to consult their own doctors. It is proposed to open a few treatment centres as an experiment and if it is found desirable further centres could be established.

Visual Defects. These are all referred to the School Oculist for refraction and the prescription of glasses when necessary. The parents make their own arrangements with local opticians but in necessitous cases glasses are provided free by the Authority. Eye tickets are provided for a few cases requiring hospital treatment.

Refraction clinics are arranged at 14 centres, generally in large schools. Children for whom glasses have been prescribed are re-examined from time to time (usually every two years) so that the glasses may be changed when necessary.

The following table gives details of the work undertaken during the year (see also Table IV— Group II):—
Spectacles prescribed by School Oculist:

Obtained by parents	+2 on	1936 pi	escriptio	n	346	
Paid for by L.E.A. 2	242 + 14	on 193	3 prescri	ption	256	
Not obtained	•••	•••	• • •	•••	69	
						671
New frames prescribed l	by School	l Oculist	:			
Obtained by parents		•••	• • •		47	
Obtained by L.E.A.					13	
Not obtained		• • •		• • •	8	
						68
Spectacles repaired by I	L.E.A.	• • •	•••			5
"Continue present specta	acles "	• • •	• • •	•••		303
"No spectacles needed"	• • •	• • •	• • •	• • •		72
Children absent from E	ye Clinics	s:				
Parents refuse exam	ination				54	
Child had left school	ol	• • •	•••	• • •	21	
Child treated private	ely	* * *	• • •	• • •	31	
Child had left distr	ict	* * *	• • •	• • •	15	
						121

Nose and Throat Defects. Until a few years ago all cases were referred to the family doctors and no arrangements were made by the Authority for treatment. It being the duty of the Authority to provide such treatment, arrangements were made with 12 hospitals. It is the responsibility of the Authority to make the best available provision for treatment but it was not possible at the time for children to be referred for treatment to a special department in charge of an aural specialist, except for cases in the eastern part of the county for whom provision was made at the Plymouth and Tavistock Hospitals.

The following rules should, according to the Chief Medical Officer of the Board of Education, be invariably applied:—

- "(1) General practitioners should not be approved if a specialist is available.
 - (2) If no specialist is available, medical practitioners holding the F.R.C.S. and having special experience of this work should be approved.
 - (3) Otherwise, general practitioners should be approved only as a temporary arrangement subject to a satisfactory report from the School Medical Officer of the area.
 - (4) A general rota of medical practitioners in an area should not be approved."

When the present scheme was started, it was understood that the appointments were temporary ones only and subject to reconsideration should a specialist be available.

A special department has now been established at the Royal Cornwall Infirmary, Truro, and Mr. M. R. Sheridan has been appointed Honorary Surgeon in charge of the department. When the extensions to the present buildings are completed it is proposed to provide Mr. Sheridan with more beds for ear, nose and throat cases, and when these are available in the special department it will be necessary to revise the Authority's present arrangements.

It was formerly suggested that 2% of the children in average attendance required operative treatment for

tonsils and adenoids during the year, but during the last few years there has been a tendency to think that only about 1% require operative treatment.

There is no doubt that many more children would be improved by operation, but it is always necessary to consider the possibility of a fatal result and only to recommend operation where it is really very desirable. It is usually considered now that the operation was too lightly undertaken in the past and the Chief Medical Officer of the Board of Education gives the following warning:—

"The enucleation of tonsils and removal of adenoids is a procedure in which all the precautions must be taken which govern the conduct of a major operation, and in which any faulty administrative or neglected medical or surgical detail may result in disastrous consequences. No child should be submitted to operation unless it is evident that non-surgical conservative methods would fail; the final selection of cases for operation should be made by a surgeon with special experience in diseases of the ear, nose and throat."

Arrangements are made for all children to be retained in hospital for at least one night after the operation.

The number of children treated is given in Table IV. Group III. Under the Authority's scheme 251 received operative treatment and 137 received treatment apart from the scheme—a total of 374. During the year 1.4% of the children in average attendance received operative treatment which is the same figure as in 1936. At this rate about 10% of children receive operative treatment during school life. In many Public Schools 70% have received this treatment, but recent investigation suggests that this is quite an unnecessary number of cases for operation. It was not found that those operated upon were appreciably less liable to colds, rheumatism and other infections. No doubt the operation should be reserved for those with special symptoms and should not be a routine treatment for ordinary enlarged tonsils.

It is now possible to get some of the chronic ear cases treated and children are being referred to the

Specialist for examination and suggested treatment. It is gratifying to find that most parents are eager to take advantage of the facilities offered.

Dental Defects. (See Table V). There are three School Dentists. All entrants are inspected and if found to require treatment such treatment is offered. Those children accepting treatment are then re-examined each year and treated if necessary, so that children in the County Scheme should have their teeth in good condition, and it is very noticeable to the School Medical Officers which children do and which do not come under dental treatment. Unfortunately all the children do not accept treatment—59.6% of those requiring treatment accepted during 1937. The figure for England and Wales for 1936 was 63.4%. For Counties only it was 62.6%. essential that the time between the dentists' visits should not exceed one year, otherwise the scheme is not likely to be useful. Starting with the 5, 6 and 7 year-old children in 1931, the age-groups for inspection and treatment have now increased until during the current year children up to and including the 14 year-old group are being inspected and treated.

At the routine inspections 18,647 children were examined. In addition the Dentists saw 139 special cases, making a total of 18,786; of these 16,149 were found to require treatment and 9,629 accepted treatment.

For every 100 children treated there were—

		Cornwall.	England & Wales.
Fillings—			
Permanent teeth		44.4	74.5
Temporary teeth		0.7	6.8
Extractions—			
Permanent teeth	• • •	20.3	35.5
Temporary teeth	• • •	85.5	158.9
Other forms of treatment—			
Permanent teeth	***	7.9 \	20.77
Temporary teeth	•••	68.1	32.7

In previous years it has been necessary to omit about 70 small schools from the dental scheme, owing to in-

sufficient staff. Now, with the appointment of a third dentist, these schools are being included in the scheme again.

During the year the dental work was continued in the holiday periods (Easter, Summer and Christmas). As a general rule this results in only half the usual percentage of children receiving treatment in the particular schools where the holiday work is carried out. In effect this means that, out of about 2,000 children inspected for treatment during the holidays, about 500 received treatment instead of about 1,000 who would have received treatment if offered it in school time.

Arrangements for treatment in schools are far from ideal and no doubt more satisfactory arrangements could be made for the actual treatment in well equipped centres apart from the schools. Unfortunately in Cornwall it would be difficult to get the children to such centres for treatment, and a smaller percentage of children would receive treatment than under the present arrangements. Eventually no doubt dental treatment will become available in some general scheme, but for the present it seems likely to remain a school service.

Dr. J. A. Clark reports—"During the last few years there has been a very marked improvement in the teeth of the children due to the regular dental treatment by the School Dentists. In some schools it is possible to tell those children who have refused dental treatment by a casual look into their mouths. As time goes on it is to be hoped that more will be able to be done in the way of conservative and prosthetic treatment."

Orthopaedic and Postural Defects. (See Table $I\nabla$, Group IV).

There are now ten orthopaedic clinics maintained by the County Council at—

Penzance. Falmouth. Bodmin.
St. Just. Truro. Wadebridge.
Helston. St. Austell. Liskeard.
Tuckingmill.

The Penzance and Falmouth Clinics are provided in conjunction with the Penzance and Falmouth Local

Education Authorities. The Falmouth Clinic opened in May, 1938.

There are also clinics at-

Launceston—maintained by the Devonian Association.

Mount Gold, Plymouth—maintained by the Plymouth Borough Council.

Hospitals. Beds are available at the following hospitals:—

The Royal Cornwall Infirmary, Truro (14 beds).

The Princess Elizabeth Orthopaedic Hospital, Exeter, in connection with the Launceston Clinic.

The Mount Gold Orthopaedic Hospital, Plymouth, in connection with the Mount Gold Clinic.

These clinics and beds have been available for children of school age for the Local Education Authority and for children under school age for the Public Health Committee. In future the number of beds at the Royal Cornwall Infirmary will be increased to 42 and with the Council's clinics will be available for non-pulmonary cases of tuberculosis, chiefly bones and joints.

Postural Defects. These defects account for a large number of attendances at the clinics. The numbers attending the nine clinics during one month were:—

School children		411
Under school age	• • •	75
Tuberculous cases		28
Adults (other than tuberculous)	• • •	103
Total	• • •	617

Of the 411 school children, 250 were attending for postural defects, including flat foot: 224 were noted as suffering from flat foot.

In his annual report for 1936 the Chief Medical Officer of the Board of Education writes:—"It is to be hoped that the next advance will take the form of

increased co-operation between those responsible for organising physical training in the schools and the orthopaedic service; there are indications that the desirability of this co-operation is being recognised in certain areas, for at least one Local Education Authority has appointed a whole-time teacher to conduct corrective classes in the schools."

The following is a summary of the work done at the clinics and hospitals in 1936 and 1937:—

	Un	.der				
	School	Age.	School	Age.	Tot	al.
	1936.	1937.	1936.	1937.	1936.	1937.
New Cases seen at the						
Clinics	97	126	336	267	433	393
Total attendance of cases	3					
on Doctors' days	727	903	3210	4240	3937	5143
Cases recommended for						
admission to Hospita	1 24	26	52	46	76	72
Number admitted during						
the year	20	14	51	39	71	53

The Orthopaedic Surgeon attends each clinic once a month and the Orthopaedic Sister once a week to carry out the necessary treatment. The attendances on the doctor's days at some of the clinics are very large and the provision of further clinics is under consideration.

Heart Disease and Rheumatism. Cases seen are referred to private practitioners.

Tuberculosis. Cases suffering or suspected to be suffering from Tuberculosis are referred to the County Tuberculosis Officer and arrangements made for supervision and treatment when necessary.

The notifications received for children between the ages of 5 and 15 were—

		1936.	1937.
Pulmonary		6	10
Non-pulmonary		4	12
Patients admitted to	Tehidy S	anatorium—	
Pulmonary	•••	5	5
Non-pulmonary	•••	7	6
Patients discharged	from Tehi	dy Sanatorium-	_
Pulmonary	• • •	4	1
Non-pulmonary	• • •	6	*6
ak .	Includes of	ne death.	

On the 31st December, 1937, there were at Tehidy 6 pulmonary and 9 non-pulmonary cases between the ages of 5 and 15 years.

The notifications are not always confirmed after investigation by the Tuberculosis Officer.

During 1937 the deaths from Tuberculosis among children of school age were—pulmonary 3, non-pulmonary 5. The deaths from non-pulmonary tuberculosis were due to meningitis.

Infectious Disease. Full directions are given to the teachers in the Green Handbook. Cases of infectious disease are reported to the County and the District Medical Officer of Health.

Exclusions from school during the year are analysed below:—

	S.M.O's.	Head Teachers.
Impetigo	8	46
Scabies	2	1
Ringworm—		
Body	1	2 3
Scalp	6	_
Other Skin Diseases	3	6
Verminous Condition	6	1
Infectious Diseases	7	Newson .
Miscellaneous	8	4
		
Totals	41	81
		_

Diphtheria. Immunisation remains the only certain method of preventing diphtheria in susceptible subjects, such as most young children are. There has been very little demand for this during the year apart from that undertaken by private medical practitioners. It is only when an epidemic is present that any real interest is taken in this subject.

Open Air Education. There is nothing new to report on this subject. Consideration is given to the arrangement of classrooms, etc., in new school buildings.

Physical Training. A separate report is prepared by the County Organiser.

Provision of Meals. Apart from the provision of milk and cod liver oil for necessitous undernourished children (see page 8), no free meals have been provided in the schools, except mid-day meals on school days for one special case.

Co-operation of Parents, Teachers, School Attendance Officers and Voluntary Bodies.

Parents. The parents are notified when children are due for examination. Parents were present during the examination of 5,888 children (2,819 boys and 3,069 girls) or 49% of the children presented for examination.

Teachers. A considerable amount of clerical work falls on the teachers, especially in the preparation of schedules, sending out of notices to parents, etc. The teachers have great influence in persuading parents to obtain treatment when necessary.

School Attendance Officers. The attendance officers endeavour to get absent children brought to the routine inspections when there is some doubt as to their fitness for school.

Voluntary Bodies. The County Nursing Association co-operates in the School Work and the Maternity and Child Welfare Work by arranging with the County Council for the appointment of suitable persons as Assistant Superintendents of the County Nursing Association, who are also Assistant Inspectors of Midwives and Health Visitors for maternity and child welfare, school services, and tuberculosis.

The District Nursing Associations co-operate in allowing their nurses to act as school nurses and health visitors.

The Cornwall County Association for the Blind arranges for its visitors to visit the homes and keep blind children (also any doubtful cases) under observation.

The County of Cornwall Association for the Deaf and Dumb undertakes similar work for deaf children.

The Cornwall Committee for the Care of Cripples. The aim of this Committee is to develop, assist and expand the orthopaedic work in the County. It deals

as far as possible with treatment, travelling expenses and training for all patients over school age and renders great assistance in helping with the arrangements made for child patients of school age and under. Voluntary helpers attend at all the clinics and undertake much of the work in connection with those clinics.

N.S.P.C.C. A grant of £5 per annum is made to the Society by the Authority. The assistance of the Society's officers is very useful in obtaining improvement of unsatisfactory conditions and in persuading parents to take advantage of the treatment which is available for their children. The inspectors receive reports not only from the school but also from any of the Authority's Officers who find unsatisfactory conditions existing.

The following work was done during the year 1936—37 as a result of reports made by the Authority's Officers:—

Visited 122 children in 46 families. Neglected or ill-treated.

218 visits were made to the homes.

Results—25 families—result satisfactory.

14 families—improving.

7 families—still under observation.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Teachers and Attendance Officers report to the District Clerk particulars of children alleged to be unable or unfit to attend an elementary school owing to permanent defect, and arrangements are made for the medical examination of such children if possible. If they are attending school the teachers present them for medical examination as "Specials."

Blind and deaf children are sent to special residential or day schools if the parents are willing. Further provision has been made for crippled children in hospital schools while under treatment. Early treatment will diminish the number requiring education in Residential Cripple Schools.

The numbers of defective children are given in Table III. It will be seen that most of the feeble-minded children are retained in public elementary schools. There are no

Special Schools to which all these children could be sent, and only a few special cases are sent to the Royal Western Counties Institution, Starcross. The Wood Report made some suggestions for the future care of these children and until some indication of future legislation is given it is unlikely that more Special Schools will be established.

A "defective" child is defined as one who is unfit for education in an elementary school but not unfit for education in a special school or class. The numbers given are only those ascertained to be defective by the School Medical Officers and do not include children not examined by them. It is not possible to examine all children alleged to be defective. The School Medical Officers report very few children as specially needing education in open air schools, as in Cornwall the conditions are very different from those found in the slums of large towns, and often a supply of milk in school effects considerable improvement, which is more likely to be permanent than education in a Special School, as experience shows a tendency for children when discharged from Special Schools to relapse.

There are no Special Schools maintained by the Education Authority, and there is no register showing the after-careers of children who have been maintained in Special Schools. Local Councillors are asked to keep such children under observation and if possible assist them in obtaining suitable employment. As many mentally deficient children are not sent to Special Schools it is not possible to notify their names to the Mental Deficiency Committee.

It is unsatisfactory that it is so difficult to obtain places in Special Schools for mentally defective children. There are always some defectives unsuitable for retention at home whose names cannot be reported to the Mental Deficency Committee because they could be educated in a Special School. This difficulty is made more obvious by the number of cases in the Public Assistance Institutions for whom no suitable schools can be found. If and when more accommodation is available it will be desirable to remove such cases from the Public Assistance Institutions.

Full-time Courses of Higher Education for Blind, Deaf, Defective and Epileptic Children. Suitable blind students are sent by the Authority for training at the South Devon and Cornwall Institution for the Blind, Plymouth, after leaving the Special School at Exeter. A few are also trained at the Exeter Institution for the Blind. Older students are occasionally recommended for training by the Cornwall County Association for the Blind, each case being considered on its merits.

During the year one boy and one girl received training at the Plymouth Institution.

Arrangements can be made for suitable cripples to receive training. Unfortunately many parents are averse to sending their children a long distance but now that a new centre is being established at Exeter (The St. Loyes Training Centre for Cripples) it is possible that parents may be more willing to send their children for training.

NURSERY SCHOOLS. There are no Nursery Schools provided by the Authority.

SECONDARY SCHOOLS.

There are 21 Secondary Schools maintained by the Authority.

Pupils are submitted to a full medical inspection on admission, and during the years in which they reach the ages of 12 and 15 years; also to a general survey in the intervening years.

All pupils attending the schools are inspected.

Medical Treatment. Parents are advised of defects requiring treatment, and pupils are re-inspected in the following term to ascertain the result. There is no "following-up" to the homes by School Nurses, except occasionally for special reasons.

Treatment is not generally provided under arrangements made by the Authority. Occasionally, however, pupils suffering from defective vision are examined by the School Oculist, and glasses are prescribed. In a few cases the Higher Education Committee recommend the provision of free glasses by the Authority. Occasionally

orthopaedic treatment is provided at the Council's clinics. Each case is considered on its merits and the parents are asked to contribute to the cost according to their means. Tonsils and adenoids operative treatment and dental treatment can be authorised for special necessitous cases.

The type of pupil for whom treatment is sometimes provided is the "special place" pupil.

Tables I and II (Secondary Schools) at the end of the report give the numbers of pupils examined and the results. It will be noted that 3,798 pupils were inspected and, apart from uncleanliness and dental defects, treatment was required for 491 pupils—13%. Of this number 139 were boys and 352 were girls. Apart from defective teeth, defective vision was by far the most common defect found. The attendances of parents at the inspections were—with boys 328, with girls 579.

The general health of the Secondary School pupils compares favourably with that of the Elementary School, especially in the case of the boys. Girls tend to develop defects more easily than boys when much time is given to school work. The Secondary School pupils are usually the pick of the Elementary Schools and many of them have received any treatment necessary before coming to the Secondary Schools.

Of the 44 cases of spinal curvature, 42 were in girls, and of the 86 cases of flat-foot, 22 were in boys and 64 in girls.

PARENTS' PAYMENTS.

Arrangements for recovering the cost of treatment from parents are as follows:—

(a) Children attending Public Elementary Schools.

DENTAL TREATMENT. Treatment is free where the income of the parents falls below the limit fixed by the Committee. Where the income is above this limit, the child brings one shilling to school.

- TONSILS AND ADENOIDS, ORTHOPAEDIC TREATMENT. Where the income exceeds the limit fixed by the Committee, the County Accountant makes a claim approved by the Chairman or Vice-Chairman of the Committee.
- SPECTACLES. Parents usually pay the optician direct. In necessitous cases an order for free glasses is issued by the Authority on the recommendation of the school managers.
- (b) Pupils in Secondary Schools. Treatment is not usually provided by the Authority, but when special cases are authorised to receive treatment under the schemes for Elementary School children the parents contribute to the cost according to their means.

MISCELLANEOUS WORK.

Medical	Exam	ina	itions	of	Teachers		 32
Examina	tions	of	Hair	for	Ringworm	• • •	 11

GENERAL.

The following comment by Dr. J. A. Clark will probably be of interest to members of the Education Committee:—

"It is now ten years since I have been doing medical inspection of children in Cornwall and it is satisfactory to report that during this time there has been a constant slow but steady improvement in the general condition of schools and scholars.

The most important improvements during these ten years have been:—

Institution of a dental service.

Provision of milk in schools.

Facilities for orthopaedic treatment.

Regular cleanliness inspections in schools.

Provision of hospital treatment for tonsils and adenoids.

Increased facilities for physical training.

Institutional facilities for low grade mental defectives.

The above is a formidable list and has been provided at considerable expense to the County but I am sure that it is money well spent and is reflected in the general improvement of the children and the greater interest taken by the parents, as shown by the increased attendance of parents at the medical inspections."

STATISTICAL TABLES.

MEDICAL INSPECTION AND TREATMENT OF CHILDREN ATTENDING PUBLIC ELEMENTARY SCHOOLS.

YEAR ENDED 31st DECEMBER, 1937.

TABLE I.

A. ROUTINE MEDICAL INSPECTIONS.

No. of Inspections in the	prescrib	ed Group	os—		
Entrants		• • •		•••	3,723
Second Age Group		• • •	• • •	•••	3,544
Third Age Group	• • •	•••		• • •	3,219
Total	•••	•••	•••	•••	10,486
В. ОТ	HER II	NSPECTI	ONS.		
Number of Special Inspect	tions	•••	•••		1,537
Number of Re-inspections	•••	•••	•••	•••	7,320
Total	• • •	•••	•••	• • •	8,857

C. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING DEFECTS OF NUTRITION, UNCLEANLINESS AND DENTAL DISEASES).

Prescribed Groups.	For defective vision (excluding squint).		Total.
Entrants	40	782	818
Second Age Group	218	497	695
Third Age Group	189	276	448
Grand Total	447	1,555	1,961

TABLE II.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1937.

	Routine	Inspections.	Special	Inspections.
Disease or Defect.	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation, but not requiring Treatment.
Skin— Ringworm: Scalp Body Scabies Impetigo Other Diseases (non-tuberculous)	3 5 19 47 51	4 1 2 11	1 5 4 32 26	- - - - 1
Blepharitis Conjunctivitis Keratitis Corneal Opacities	29 5 1	1 1 1	2 6 1	_ _ _
Other Conditions (excluding Defective Vision and Squint) Defective Vision (excluding Squint) Squint Ear—	8 447 82	2 81 20	6 140 31	- 9 1
Defective Hearing Otitis Media Other Ear Diseases Nose and Throat—	48 13 4	24 10 —	8 9 	2 2 —
Chronic Tonsillitis only Adenoids only Chronic Tonsillitis and Adenoids Other Conditions Enlarged Cervical Glands (Non-	162 24 666 52	122 7 92 8	9 2 48 13	5 1 10 3
Tuberculous) Defective Speech Heart and Circulation— Heart Disease:	11 3	9 14	5 —	1 2
Organic Functional Anæmia Lungs—	6 3 47	17 15 5		5 3 —
Bronchitis Other Non-Tuberculous Diseases! Tuberculosis— Pulmonary:	39 30	6 65	1 6	6
Definite Suspected	2	_	2	_
Bones and Joints Skin Other Forms	2 	$\frac{\overline{2}}{1}$		
Nervous System— Epilepsy Chorea Other Conditions	1 12	10 5 9	1 2 4	2 1 2
Deformities: Rickets Spinal Curvature Other Forms Other Defects and Diseases (excluding defects of nutrition, uncleanliness and dental diseases)	1 70 113 150	6 7 94 63	1 11 36 34	- 1 1 11
Totals	2,156	715	463	69

B. CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

No. Age-groups Child		A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
	Inspected	No.	%	No.	%	No.	%	No.	%
Entrants	3723	805	21.6	2624	70.5	269	7.2	25	0.7
2nd Age Group	3544	710	20.0	2474	69.8	322	9.1	38	1.1
3rd Age Group	3219	776	24.1	2206	68.5	217	6.7	20	0.6
Total	10486	2291	21.9	7304	69.7	808	7.7	83	0.8

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1937.

BLIND CHILDREN.

At Certified Schools for the Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
6	_	_	2	8

PARTIALLY SIGHTED CHILDREN.

At Certified Schools for the Partially Sighted.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
 	5	_	1	6

DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
15	1	l	l	18

PARTIALLY DEAF CHILDREN.

	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
→	_	18	_	_	18

MENTALLY DEFECTIVE CHILDREN.

Feeble-Minded Children.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.		At no School or Institution.	Total.
			Boys.	Girls.	Total.
Children 'notified' to the Mental Deficiency Committee during the year		11	7	18	

EPILEPTIC CHILDREN.

Children suffering from severe Epilepsy.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
2	2		11	15

PHYSICALLY DEFECTIVE CHILDREN.

A. Tuberculous Children.

I. Children suffering from Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
_	-	6		6

11. Children suffering from Non-Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
Weamailt	1	8	1	10

B. Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
	18	1	20	39

C. Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
2	20	4	18	44

D. Children with Heart Disease.

At Certified Special Schools.	ecial Elementary A		At no School or Institution.	Total.
	9	2 .	14	25

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Children suffering from any combination of the following defects:—
Total Blindness, Total Deafness, Mental Defect, Severe Epilepsy,
Active Tuberculosis, Crippling, Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.		
1	3		9	13

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31st DECEMBER, 1937.

Group I. Minor Ailments (excluding Uncleanliness).

D. C.	Number of Defects treated, or under treatment, during the year.			
Disease or Defect.	Under the Authority's Scheme.	Otherwise.	Total.	
Skin— Ringworm—Scalp— X-Ray Treatment Other Treatment Ringworm—Body Scabies Impetigo Other skin disease Minor Eye Defects	 4 54 25 170 2	4 -4 1 25 8	8 54 29 171 27	
(Excluding cases in Group II) Minor Ear Defects	9	3	12	
Miscellaneous (Minor injuries, bruises, sores, etc.)	61		61	
Total	346	45	391	

Group II. Defective Vision and Squint.

	No. of	Defects dealt	with.
	Under the Authority's Scheme.	Otherwise.	Total.
Errors of Refraction (including Squint)	1,114	33	1,147
Other defect or disease of the eyes (excluding cases in Group I)		- 1	1
Total	1,114	34	1,148
No. of Children for whom spectacles were— (a) Prescribed (b) Obtained	6 55 600		655 600

Group III. Treatment of Defects of Nose and Throat.

	Nun	nber of Defects		
Received Operative Treatment				
Under the Authority's Scheme, in Clinic or Hospital	By Private Prac- titioner or Hospital' apart from the Anthority's Scheme	Total	Received other forms of Treatment	Total number Treated
$\begin{bmatrix} (i) & (ii) \\ 4 & 3 \end{bmatrix} \begin{bmatrix} (iii) & (iv) \\ 244 & - \end{bmatrix}$	(i (ii) ((iii) (iv) 6 1 130 -	$ \begin{vmatrix} (i) \\ 10 \end{vmatrix} \begin{vmatrix} (ii) \\ 4 \end{vmatrix} \begin{vmatrix} (iii) \\ 374 \end{vmatrix} \begin{vmatrix} (iv) \\ - \end{vmatrix} $	54	442

⁽i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids. (iv) Other defects of nose and throat.

Group IV. Orthopaedic and Postural Defects.

	Under	the Autho	rity's		Otherwise		
	Resi- dential Treatment with Education	Resi- dential Treatment without Education	Non-Residential Treatment at an Orthopædie Clinic	Resi- dential Treatment with Education	Resi- dential Treatment without Education	Non-Residential Treatment at an Orthopaedie Clinic	Total Number Treated
Number of children treated	46	_	923	Not kno proba	wn— bly none	5	928

TABLE V.

DENTAL INSPECTION AND TREATMENT.

(1) Number of Chi the Dentists—	ldren insp	pected by	(2) Number found to require treatment 16,149
Routine Age	Groups:		
Aged 5		1,934	
,, 6		2,446	
., 7		2,514	(3) Number actually treated 9,629
,, 8		2,201	
,, 9		2,186	
,, 10		1,953	
,, 11		1,894	(4) Attendances made by
., 12	• • •	1,629	children for treatment 9,629
., 13	• • •	1,467	
,, 14	•••	423	
Total	•••	18,647	(5) Half-days devoted to:— Inspection only 23
Specials	• • •	139	Inspection and Treatment 959
Grand To	tal	18,786	Total 982

(6) Fillings:— Permanent Teeth Temporary Teeth	4,279	(8) Administrations of anaesthetics for ex	
	4,350	(9) Other Operations	
		Permanent Teet Temporary Tee	
		remporary ree	th 6,555
(7) Extractions:—	1.050		7,321
Permanent Teeth Temporary Teeth	1,959		
remporary reem			
	10,194		
	TABLI	E VI.	
UNCLEANLINES	S AND V	ERMINOUS COND	ITIONS.
(1) Average number of	visits per	school made during	g the
year by the School	l Nurses	•••	2.92
(2) Total number of example (2)	aminations	of children in the Sc	hools
by School Nurses	•••	•••	83,554
(3) Number of individu	ial children	found unclean	3,930
(4) Number of children	cleansed u	nder arrangements	made
by the Authority	•••	•••	Nil.
(5) Number of cases in	which legal	proceedings were ta	ken Nil.

SECONDARY SCHOOLS.

TABLE I. MEDICAL INSPECTION OF PUPILS FOR THE YEAR ENDED 31st DECEMBER, 1937.

Routine Ex	aminations	•					
Entrant	ts		•••				731
Twelve-	year-olds		•••	•••		• • •	530
Fifteen	-year-olds		• • •		•••	• • •	589
Other a	ages	•••	•••	• • •	•••	•••	1,948
	Total	•••	•••	•••	•••	•••	3,798
Re-examina	tions.						
Boys	• • •	• • •	• • •	• • •	•••	• • •	163
Girls	•••	•••	•••	•••	• • •	* * *	558
	Total	•••	•••	•••	•••	•••	721
Number of	Individua	l Child:	ren exar	nined			3,798
Number of							491
	ding uncle	-			eases).		
	Percenta	ge requ	iring T	reatment	• • •	•••	12 ·93
Number of		or Guar	dians p	resent at	Examin	ations:-	
With 1		•••	•••	•••	•••	•••	328
With C	irls	• • •	* 7 *	• • •	•••	• • •	579

TABLE II. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1937.

1	Routine I	nspections.	
Disease or Defect.	Requiring Treatment.	Requiring to be kept under observation but not requiring Treatment.	Treated.
Malnutrition Clothing Skin Disease Hair Defective Vision Squint Eye Disease External Eye Disease External Eye Disease Ear Disease Nose and Throat Enlarged Cervical Glands Defective Speech Heart Disease—Organic Functional Anaemia Tuberculosis (Pulmonary)—Definite Suspected (Non-Pulm.) Nervous System (conditions other than Epilepsy Chorea Overstrain Spinal Curvature Flat Foot Other Deformities Dental Defects Other Defects and Diseases	2		1
Totals	1,066	204	713







